

Remarks:

The above amendments and these remarks are responsive to the Office action dated November 22, 2005. Prior to entry of this response, claims 1-10, 12, and 14-33 were pending in the application. In the Office action, 1) corrected drawings in compliance with 37 CFR 1.121(d) are required; 2) claims 19-27 are allowed; 3) claims 1-10, 12, 14-15, and 28-33 are rejected under 35 USC 103(a) as being unpatentable over Kurematsu (US 6,808,271) in view of Goldenberg et al. (US 4,773,731) and Ogawa (US 6,513,935); and 4) claims 16-18 are objected to as being dependent upon a rejected base claim. In view of the amendments above, and the remarks below, Applicant respectfully requests reconsideration of the application and allowance of the pending claims.

Interview Summary

Applicant thanks the Examiner for discussing the merits of the November 22, 2005 Office action during a January 12, 2006 telephone interview. As requested by the Examiner during the interview, Applicant faxed the Examiner corrected drawings and a proposed amendment to claim 1. The Examiner considered these proposals, and, in a January 17, 2006 telephone message, indicated that the drawings are acceptable, and that the proposed amendment to claim 1 distinguishes the prior art. Accordingly, the proposed amendments to claim 1 and corrected drawings are formalized in this paper. Rejection of claim 1 should therefore be withdrawn. Furthermore, claims 2-10, 12, and 14 depend from claim 1 and rejection of those claims should also be withdrawn. Claim 33 has also been amended to incorporate the limitation the Examiner has agreed distinguishes the prior art. Therefore, rejection of claim 33 should be withdrawn.

During the telephone interview, the merits of the rejection of claim 15 were also discussed. The Examiner invited the Applicant to formalize arguments as to why the cited prior art does not render claim 15 obvious. Such arguments are presented below.

Allowable Subject Matter

Applicant thanks the Examiner for allowing claims 19-27. These claims should be passed to issuance.

Formal Matters

Applicant respectfully traverses the objection to the drawings for at least the reasons previously presented. Nonetheless, in order to advance prosecution without further delay, Applicant is hereby presenting new Figures 23-31, which schematically show that which the Examiner has stated is not shown in Figures 1-22. Accordingly, it is believed that objection to the drawings should be withdrawn.

New Figures 23-31 do not add new matter, because everything that is illustrated in Figures 23-31 is described in the original disclosure. See, for example, page 17, line 22 to page 18, line 3 (emphasis added):

In alternative embodiments, bumps 1370 are two-dimensional hills that are **regularly** or **randomly** distributed across the output side of Fresnel lens 1310. In an embodiment, at least one bump 1370 (e.g., 1370A) has a **different size** and/or **shape** than another bump (e.g., 1370B).

New Figures 23-28 show a plan view of a portion of the output side of a Fresnel lens. New Figure 23 shows regularly distributed bumps having the same size and shape. New Figure 24 shows regularly distributed bumps having the same shape but different sizes. New Figure 25 shows regularly distributed bumps having different shapes. New Figure 26 shows randomly distributed bumps having the same size and shape. New Figure 27 shows randomly distributed bumps having the same shape but different sizes. New Figure 28 shows randomly distributed bumps having different shapes. Figure 29 shows a perspective cross-section view of a portion of the output side of a Fresnel lens with regularly distributed bumps having the same size and shape. Figure 30 shows a cross-section view of a portion of the output side of a Fresnel lens with randomly distributed bumps having different shapes. Figure 31 shows a cross-section view of a portion of the output side of a lens with randomly distributed

bumps having the same shape but different sizes. Of course, it would be impracticable to include a new Figure for every different possible regular distribution, random distribution, size, shape, and/or combinations thereof. Accordingly, new Figures 23-31 are representative of the many possible variations within the scope of the original Specification and Drawings.

New paragraphs corresponding to Figures 23-31 have been added to the Brief Description of the Drawings. Again, no new matter has been added, as the new paragraphs mimic disclosure already present in the specification.

Rejections under 35 USC § 103

Applicant respectfully traverses the rejection of claims 1-10, 12, 14-15, and 28-33 for at least the reasons previously presented. Nonetheless, in order to advance prosecution without further delay, Applicant is hereby amending independent claims 1 and 33 in accordance with the January 12, 2006 Examiner interview and the Examiner's January 17, 2006 follow-up telephone message. Accordingly, it is believed that claims 1-10, 12, 14, and 33 are in condition for allowance.

Claim 15

Independent claim 15 recites, among other limitations:

a Fresnel lens to display an image, the Fresnel lens having an output ray angle of substantially zero near a center of the Fresnel lens and an output ray angle whose magnitude increases as a radial distance (R) from the center increases (emphasis added).

The Examiner acknowledges that Kurematsu does not teach this limitation:

Kurematsu teaches the salient features of the present invention, except

(claim 15) the Fresnel lens
having an output ray angle of substantially zero near a center of the Fresnel lens and an
output ray angle whose magnitude increases as a radial distance (R) from the center
increases; (claim 28) a screen having a diffusion layer;

—November 22, 2005 Office Action, page 3, line 18, and page 4, lines 6-9.

The Examiner states that Equation 6 from Goldenberg teaches this
limitation. Equation 6 from Goldenberg is Snell's law:

Snell's Law predicts the refraction angle ω' as:

$$\omega' = \sin^{-1} \left[\frac{n_1 \sin(\omega)}{n_2} \right], \quad (6)$$

where n_2 is the refractive index for the region 316.

Snell's law cannot render claim 15 obvious because Snell's law does not
include as a variable a radial distance (R). Snell's law only gives the relationship
between angles of incidence and refraction for a wave impinging on an interface
between two media with different indices of refraction. The law follows from the
boundary condition that a wave be continuous across a boundary, which requires
that the phase of the wave be constant on any given plane.

Snell's Law does not in any way describe output ray angles as a function
of a radial distance (R). Because Snell's law does not even hint at this concept,
which is recited in claim 15, Snell's law cannot properly be used to render claim
15 obvious. Furthermore, no other portion of Goldenberg teaches a Fresnel lens
having an output ray angle of substantially zero near a center of the Fresnel lens
and an output ray angle whose magnitude increases as a radial distance (R)
from the center increases. Therefore, rejection of claim 15 should be withdrawn.

Claims 28-32


Applicant respectfully traverses the rejection of claims 28-32 for at least the reasons previously presented. However, in order to advance prosecution without further delay, Applicant hereby cancels claims 28-32 without prejudice. Applicant reserves the right to pursue claims 28-32 in a continuation application.

Conclusion


Applicant believes that this application is now in condition for allowance, in view of the above amendments and remarks. Accordingly, Applicant respectfully requests that the Examiner issue a Notice of Allowability covering the pending claims. If the Examiner has any questions, or if a telephone interview would in any way advance prosecution of the application, please contact the undersigned attorney of record.

**CERTIFICATE OF
TRANSMISSION/MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postages as first class mail in an envelope addressed to: Mail Stop AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on January 17, 2006.


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Amendments to the Drawings:

Please add sheets 21 and 22 to the drawings. Sheet 21 and 22 incorporate the desired changes in the drawings. No new matter has been added.

Attachment: New Drawing Sheets 21/22 and 22/22